Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 74, 78, and 101	)	ET Docket No. 96-35
of the Commission's Rules to Adopt More	)	
Flexible Standards for Directional	)	
Microwave Antennas	)	

To: The Commission

Comments of the Society of Broadcast Engineers, Inc.

The Society of Broadcast Engineers, Incorporated (SBE), the national association of broadcast engineers and technical communications professionals, with more than 5,000 members in the United States, hereby respectfully submits its comments in the above-captioned Notice of Proposed Rule Making relating to minimum antenna standards for fixed point-to-point microwave relay antennas.

I. SBE Supports Proposal To Allow Alternative Definitions for Category A and Category B Microwave Antennas

1. SBE supports without reservation the proposal to define minimum antenna standards for fixed services on the basis of a minimum gain figure, or alternatively compliance with maximum half power beamwidths and off-axis suppression requirements. However, SBE believes that the rule making does not go far enough: the Commission needs to apply minimum antenna performance requirements to receiving antennas, and needs to update its list of frequency congested areas.

II. Need for Minimum Antenna Standards for Receiving Antennas

2. The purpose of minimum antenna standards is spectrum efficiency. Fixed point-to-point microwave stations employing highly directive antennas allow frequency re-use, thereby improving spectrum efficiency. Unfortunately, a *receiving* antenna with an unnecessarily broad radiation pattern envelope ("RPE") can have just as great a preclusive effect as a transmitting antenna with an overly broad pattern. SBE therefore urges the Commission to apply these

proposed more flexible minimum antenna standards to receiving antennas as well as transmitting antennas.

III. Need for Updated List of "Frequency Congested" Areas

3. On June 22, 1983, the Commission issued a public notice, "Private Microwave Congested Areas" defining 68 areas for six microwave bands that were deemed to be "frequency congested," and therefore requiring at least Category A transmitting antennas. Although that notice stated that the list would be regularly updated, to the SBE's knowledge no update has ever been issued.

4. SBE therefore urges the Commission to issue an updated list of "frequency congested areas" for all Part 101 microwave bands. Only with the issuance of such an updated list can the Commission's goal of spectrum efficiency be properly implemented. Further, SBE recognizes that this list does not apply to Parts 74 and 78, although the microwave bands covered by these rule parts are, in fact, often frequency congested. In 1990, the SBE initiated a Petition for Rule Making, MM Docket 90-500, which sought to identify the frequency congested areas for the microwave bands covered by these rule parts, but that rule making met opposition. SBE believes that most of that opposition was due, not to beliefs that the Broadcast Auxiliary and Community Antenna Relay Service (CARS) microwave bands were not frequency congested, but rather because of disagreements concerning how to handle many problems unique to coordination within the Broadcast Auxiliary Service (BAS), such as joint site congestion, where the superior off-axis rejection capabilities of Category A antennas are of less benefit as far as allowing frequency re-use than for typical Part 101 microwave station paths, which tend to be more random.

5. And there are other microwave path problems not necessarily within the control of the broadcaster, such as structural and windload limitations on a leased tall tower or building, and ever increasing expectations of "no visual impact," especially for structures of local or national historic importance. A possible solution would be to define BAS frequency congested areas and require Category A antennas for new or modified fixed links in these areas, subject, however, to automatic waiver upon written concurrence by the local BAS frequency coordinating committee. This would serve the dual purposes of recognizing the existing frequency congestion and requiring upgraded antennas in the general case, yet provide a clear and reasonably simple procedure for dealing with unique local issues not under control of the broadcaster.

IV. Summary

6. SBE applauds this Commission-initiated rule making. But the Commission needs to take the obvious step of applying minimum antenna standards to receiving antennas as well as transmitting antennas, and needs to update its list of "frequency congested" areas and microwave bands. In the event that a portion of these comments are deemed to be beyond the original scope of this instant rule making, SBE urges the Commission to issue a Further Notice of Proposed Rule Making dealing with these issues.

Respectfully submitted,

Society of Broadcast Engineers, Inc.

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By _____
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